

IN THE CLAIMS

The Claims as they currently stand are presented below.

1. (Currently amended) A universal holding fixture for holding an object, comprising:
a plurality of dual axis clamps that are each rotatable, slidable and lockable to two rods
to form an articulated structure, each dual axis clamp comprising a single member having first
and second substantially orthogonal slotted holes through which respective rods extend for
5 clamping the respective rods, wherein slots are formed in each single member extending along
an edge of each hole that extend through a lateral wall of the member, which rods and clamps
are rotatable and slidable relative to each other around and along substantially orthogonal axes
defined by the slotted holes to position the rods at varying and arbitrary angles relative to each
other, and wherein selected rods are suitably positioned and secured to hold the object.
2. (Original) The fixture recited in Claim 1 wherein selected ones of the dual axis
clamps are secured to a base.
3. (Previously presented) The fixture recited in Claim 2 wherein a fixed rod is secured
to the base and the articulated structure comprises eight dual axis clamps that are rotatable,
slidable and lockable to six rods.
4. (Previously presented) The fixture recited in Claim 3 further comprising two
additional rods that are slidably secured to a selected one of the four rods by way of two
additional dual axis clamps.
5. (Previously presented) The fixture recited in Claim 1 wherein the articulated
structure comprises eight dual axis clamps that are rotatable, slidable and lockable to six rods.
6. (Previously presented) The fixture recited in Claim 5 further comprising two
additional rods that are coupled a selected one of the four rods by way of two additional dual
axis clamps.
7. (Previously presented) The fixture recited in Claim 1 wherein the articulated
structure comprises:
a plurality of first dual axis clamps that are each rotatable, slidable and lockable to a
fixed rod and that are each rotatable, slidable and lockable to a second transverse rod;
5 a plurality of second dual axis clamps that are each rotatable, slidable and lockable to a
respective second rod and that are each rotatable, slidable and lockable to a third rod that is
disposed generally transverse to the respective second rod;

a plurality of third dual axis clamps that are each rotatable, slidable and lockable to a respective third rod and that are each rotatable, slidable and lockable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are each rotatable, slidable and lockable to a respective fourth rod and that are each rotatable, slidable and lockable to a fifth rod.

8. (Previously presented) The fixture recited in Claim 7 further comprising a plurality of fifth dual axis clamps that are each rotatable, slidable and lockable to the fifth rod and that are each rotatable, slidable and lockable to a sixth rod.

9. (Previously presented) The fixture recited in Claim 1 wherein a plurality of first dual axis clamps are securable to a base and wherein the fixture further comprises a plurality of fifth dual axis clamps that are each rotatable, slidable and lockable to the fifth rod and that are each rotatable, slidable and lockable to a sixth rod, and wherein the sixth rods support the fifth rod at different positions above the base.

10. (Original) The fixture recited in Claim 7 further comprising a plurality of threaded machine screws that interconnect pairs of second and third dual axis clamps.

11. (Currently amended) A universal holding fixture for holding an object, comprising:
a base; and

an articulated structure secured to the base that comprises a plurality of dual axis clamps that are each rotatable, slidable and lockable to two rod, each dual axis clamp comprising a single member having first and second substantially orthogonal slotted holes through which respective rods extend for clamping the respective rods, wherein slots are formed in each single member extending along an edge of each hole that extend through a lateral wall of the member, which rods and clamps are rotatable and slidable relative to each other around and along substantially orthogonal axes defined by the slotted holes to position the rods at varying and arbitrary angles, and wherein ends of selected ones of the rods are suitably positioned and secured to hold the object.

12. (Previously presented) The fixture recited in Claim 11 wherein a fixed rod is secured to the base and the articulated structure comprises eight dual axis clamps that are rotatable, slidable and lockable to six rods.

13. (Previously presented) The fixture recited in Claim 12 further comprising two additional rods that are coupled to a selected one of the six rods by way of two additional dual axis clamps.

14. (Previously presented) The fixture recited in Claim 11 wherein the articulated structure comprises:

a plurality of first dual axis clamps that are each rotatable, slidable and lockable to a fixed rod and that are each rotatable, slidable and lockable to a second transverse rod;

5 a plurality of second dual axis clamps that are each rotatable, slidable and lockable to a respective second rod and that are each rotatable, slidable and lockable to a third rod that is disposed generally transverse to the respective second rod;

10 a plurality of third dual axis clamps that are each rotatable, slidable and lockable to a respective third rod and that are each rotatable, slidable and lockable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are each rotatable, slidable and lockable to a respective fourth rod and that are each rotatable, slidable and lockable to a fifth rod.

15. (Previously presented) The fixture recited in Claim 14 further comprising a plurality of fifth dual axis clamps that are each rotatable, slidable and lockable to the fifth rod and that are each rotatable, slidable and lockable to a sixth rod.

16. (Original) The fixture recited in Claim 14 further comprising a plurality of threaded machine screws that interconnect pairs of second and third dual axis clamps.

17. (Currently amended) A universal holding fixture for holding an object, comprising:
a base; and

an articulated structure rotatably secured to the base that comprises:

5 a plurality of first dual axis clamps that are each rotatable, slidable and lockable to a fixed rod and that are each rotatable, slidable and lockable to a second transverse rod;

a plurality of second dual axis clamps that are each rotatable, slidable and lockable to a respective second rod and that are each rotatable, slidable and lockable to a third rod that is disposed generally transverse to the respective second rod;

10 a plurality of third dual axis clamps that are each rotatable, slidable and lockable to a respective third rod and that are each rotatable, slidable and lockable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are each rotatable, slidable and lockable to a respective fourth rod and that are each rotatable, slidable and lockable to a fifth rod;

15 and wherein each dual axis clamp comprises a single member having first and second substantially orthogonal slotted holes through which respective rods extend for clamping the respective rods, wherein slots are formed in each single member extending along an edge of each hole that extend through a lateral wall of the member, which rods and clamps are rotatable and slidable relative to each other around and along substantially orthogonal axes defined by the slotted holes.

18. (Previously presented) The fixture recited in Claim 17 further comprising a plurality of fifth dual axis clamps that are each rotatable, slidable and lockable to the fifth rod and that are each rotatable, slidable and lockable to a sixth rod.

19. (Original) The fixture recited in Claim 17 further comprising a plurality of threaded machine screws that interconnect pairs of second and third dual axis clamps.